

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
AB Specialty Silicones Fire - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region V

Subject: **POLREP #6**
Progress POLREP
AB Specialty Silicones Fire

Waukegan, IL
Latitude: 42.3929181 Longitude: -87.8938617

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From: Dan Haag, On-Scene Coordinator

Date: 6/18/2019

Reporting Period: 6/3/19 - 6/16/19

1. Introduction

1.1 Background

Site Number:	C5PB	Contract Number:	
D.O. Number:		Action Memo Date:	
Response Authority:	CERCLA	Response Type:	Emergency
Response Lead:	PRP	Incident Category:	Removal Action
NPL Status:	Non NPL	Operable Unit:	
Mobilization Date:	5/4/2019	Start Date:	5/4/2019
Demob Date:		Completion Date:	
CERCLIS ID:		RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

Emergency Response

1.1.2 Site Description

At approximately 2145 hours on 5/3/2019, an explosion occurred at the AB Specialty Silicones, LLC plant in Waukegan, Illinois (Site). The explosion could be felt for miles and damage was caused to numerous adjacent buildings. Waukegan Fire Department (WFD) extinguished the fire by 0330 hours on 5/4/19. The incident has left 4 dead.

1.1.2.1 Location

AB Specialty Silicones, LLC is located at 3790 Sunset Avenue in Waukegan, Illinois

1.1.2.2 Description of Threat

AB Specialty Silicones, LLC is a manufacturer and distributor of specialty silicone chemicals, serving industries including: personal care, chemical manufacturing, dental & medical, mold making, electronic encapsulation, adhesives/sealants, coatings, gypsum, and pressroom. Two primary products produced and stored at the facility include: octamethylcyclotetrasiloxane (product name D4) and polydimethylsiloxane (product name SF350). Plant representatives also stated that small quantities of toluene, isopropyl alcohol, acetone, phosphoric acid, acetic acid, and sodium hydroxide flake are stored and used at the plant.

1.1.3 Preliminary Removal Assessment/Removal Site Inspection Results

At 0100 hours on 5/4/19, Illinois EPA requested the assistance of U.S. EPA to conduct air monitoring downwind of the incident to support WFD. An EPA OSC and START contractors arrived on scene at approximately 0345 hours and to support WFD and LCHD with downwind air monitoring. Throughout the early morning hours and into the mid-day of 5/4/19, EPA and START conducted air monitoring with a MultiRae 5-gas meter in the adjacent neighborhood downwind (south of Site), which included an elementary school, daycare, church, apartment buildings (west of the Site), and adjacent business; no elevated readings were detected.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

At approximately 2145 hours on 5/3/2019, an explosion occurred at the AB Specialty Silicones, LLC plant in Waukegan, Illinois (Site). The explosion could be felt for miles and damage was caused to numerous adjacent buildings. Waukegan Fire Department (WFD) extinguished the fire by 0330 hours on 5/4/19. The incident has left 4 dead. On 5/9/19, the search and recovery effort conducted by Coroner and WFD concluded and control of the Site was turned back over to the AB Specialty Silicones, LLC. The cause of the explosion is still under investigation as of 5/7/19, and investigators state that it could take up to a month to pinpoint the cause of the explosion. Since 5/9/19, EPA has been coordinating with AB Specialty Silicones, LLC, CSB, and OSHA to direct response actions to mitigate actively releasing or threatened release of CERCLA hazardous substances at the site, while ensuring evidence preservation for ongoing investigations.

2.1.2 Response Actions to Date

Operational Period of 6/3 – 6/16

Operations at Plant Site:

During this operational period, work focused on the relocation of drums/containers from the high-bay warehouse to the evidence warehouse in accordance with the Evidence and Site Control Agreement executed as part of the ongoing CSB and OSHA investigations. The typical process followed by the response contractors at the Site includes: 1) securing overhead hazards; 2) decontaminating/removing containers; 3) removing any accessible sludge and 4) repeating the process while moving further inside the high-bay warehouse structure. Mitigation of overhead hazards and sludge removal from within the high-bay warehouse will remain an ongoing task throughout the duration of the response while work occurs within the structure. To date, a total of 12 van trailers of material have been moved to the evidence warehouse, and the total number of containers relocated is 533 (310 contain raw materials or finished products, of which 97 contain U.S. DOT hazardous material).

As containers were removed from the northwestern corner of the high-bay warehouse structure on 6/12, a label with "Peroxide Former" affixed to tank # T-22 became visible. Work in the area was halted, and access around the area of the tank was restricted. The PRP states that the tank was purchased in late 2018 and installed in early 2019. The PRP also stated that do not store peroxide formers in this tank and that the process in which the tank is used for does not generate any peroxide formers. The PRP maintains that they did not affix the label to the tank, and they believe that the label was placed on the tank by the previous owner. The PRP is searching for all paperwork associated with the tank purchase, but it is suspected that some of the paperwork was destroyed in the explosion and fire. No work is occurring in the area around the tank until there is direct evidence that the tank does not contain peroxide formers. If adequate documentation is not provided, the tank will be managed as labeled.

During sludge removal operations on 6/14, a leak was discovered on tank # T10, which contains Andisil OH750 (Dimethylpolysiloxanes, silanol terminated). Andisil OH750 is non-flammable siloxane product. The leak originated from a coupling at the bottom of the tank, which appeared to have been damaged during the explosion. The PRP's response contractor was able to disconnect the pump from the tank and manually adjust the piping and coupling to stop the leak. The tank was sampled, and the sample was analyzed by the PRP's QC laboratory. The tank contents were found to be within product specification. A tank transfer plan is currently being prepared to transfer the contents of this tank (and all other tanks, provided the contents of each tank is within product specification) to totes.

Storm water management from the Site continued during the operational period. Work included maintenance to the berms along the north and west boundaries of the Site and active collection of storm water runoff collected in the berms. A vacuum truck crew remained on standby after hours to support storm water management during rain events.

During the operational period, crews managing stormwater noted an area in the grass near the northwestern edge of the property that was unusually saturated and discovered 2 x 3-inch corrugated poly pipes buried approximately 6 inches deep. The pipes appear to be drainage pipes but are not found on any facility drawings. The PRP is working to track down any additional documents that may show where the pipes originate. The pipes were cut and capped off, and any water or material flowing through the pipes is being managed with the stormwater and containerized for offsite disposal.

Operations at Sunset Avenue Ditch:

Daily inspection and maintenance of hard boom, sorbent boom and sorbent pom poms with change out as needed occurred during the operational period. A vacuum truck was utilized to remove recoverable sheen or product as needed.

Operations at Wetlands and Osprey Lake Area:

Daily inspection and maintenance of hard boom, sorbent boom and sorbent pom poms with change out as needed occurred during the operational period. The PRP's contractors cleared vegetative debris from near the primary boom set, so that free product come be manually pushed toward the boom set and recovered with absorbent pom poms. Additional absorbent pom poms were deployed throughout the drainage ditch and wetlands area in smaller collection areas established where material is naturally being held.

A meeting was held on 6/7 to discuss a plan for longer-term remediation at the wetlands and Osprey Lake areas. Attendees of the meeting included: EPA, START, IEPA, IDNR, City of Gurnee Park District, Illinois Attorney General's Office, Lake County State's Attorney's Office, PRP's outside counsel, and PRP's environmental consultant.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

2.1.4 Progress Metrics

Waste Stream	Medium	Quantity	Manifest #	Treatment	Disposal
Contaminated sorbent/debris		2x20 yd rolloff			pending
Contaminated storm water		65,000 gals			pending

2.2 Planning Section

2.2.1 Anticipated Activities

2.2.1.1 Planned Response Activities

Planned activities for the next operational period (6/17 - 6/23) include: 1) removal of debris and sludge from far eastern bay of the high-bay warehouse structure to provide access for the removal a high-pressure gas cylinder; 2) removal and relocation to the evidence warehouse of any remaining drums/totes containing raw materials/finished products, including all hazardous materials containers; 3) removal of contaminated debris from high-bay warehouse; 4) sampling of and transfer of material inside the aboveground storage tanks; 5) continued management of stormwater runoff for the Site; and 6) continued daily inspection and maintenance of hard boom, sorbent boom and sorbent pom poms with change out as needed occurred

2.2.1.2 Next Steps

2.2.2 Issues

2.3 Logistics Section

No information available at this time.

2.4 Finance Section

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
TAT/START	\$45,000.00	\$30,000.00	\$15,000.00	33.33%
Intramural Costs				
Total Site Costs	\$45,000.00	\$30,000.00	\$15,000.00	33.33%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

No information available at this time.

3. Participating Entities

3.1 Unified Command

AB Specialty Silicones, LLC
U.S. Environmental Protection Agency

3.2 Cooperating Agencies

Chemical Safety Board
City of Gurnee Park District
City of Waukegan Department of Public Works
Illinois Environmental Protection Agency
Illinois State Fire Marshal
Lake County Department of Transportation
Lake County Emergency Management Agency
Lake County Health Department
Lake County Stormwater Management Commission
U.S. Department of Labor - Occupational Safety & Health Administration
Waukegan Fire Department

4. Personnel On Site

U.S. EPA - 1
START - 1

5. Definition of Terms

ATSDR: Agency for Toxic Substances and Disease Registry
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CSB: Chemical Safety Board
DOT: U.S. Department of Transportation
IDNR: Illinois Department of Natural Resources
IEPA: Illinois Environmental Protection Agency
LCEMA: Lake County Emergency Management Agency
LCHD: Lake County Health Department
LCSMC: Lake County Stormwater Management Commission
mg/L: Milligrams Per Liter
NIOSH: National Institute for Occupational Safety and Health
OSC: On-Scene Coordinator

PCB: Polychlorinated Biphenyl
PEL: Permissible Exposure Limit
PID: Photoionization Detector
POLREP: Pollution Report
ppm: Parts Per Million
PRP: Potentially Responsible Party
START: Superfund Technical Assessment and Response Team Contractor
U.S. EPA: United States Environmental Protection Agency
VOC: Volatile Organic Compound
WFD: Waukegan Fire Department

6. Additional sources of information

6.1 Internet location of additional information/report

6.2 Reporting Schedule

POLREPS to be submitted weekly.

7. Situational Reference Materials

No information available at this time.





